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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,625	01/10/2005	Masayuki Kamite	264121US3PCT	5601
22850	7590	06/25/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER LEYSON, JOSEPH S	
			ART UNIT 1722	PAPER NUMBER
			NOTIFICATION DATE 06/25/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/520,625	Applicant(s) KAMITE, MASAYUKI	
	Examiner Joseph Leyson	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11,14,15 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11,14,15 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The REQUEST FOR CONTINUED EXAMINATION TRANSMITTAL filed on May 14, 2007 did NOT request consideration of the After Final amendment filed on March 26, 2007. Therefore, the amendments therein to the disclosure and to the drawings have NOT been entered, and the following objections to the disclosure and to the drawings mentioned in the previous office action mailed on December 13, 2006 still apply.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Figure 6 only shows two members designated by reference character "103" of the three members including a magnet, an eddy current separator and a gravity separator. Therefore, the missing third member must be shown (or properly labeled) or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

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consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. No new matter should be added.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "103" has been used to designate a magnet, an eddy current separator and a gravity separator, i.e. all three members should have different reference characters.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. No new matter should be added.

Specification

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4. The disclosure is objected to because of the following informalities: the specification (i.e., pp. 32-36) uses reference character "103" to designate a magnet, an eddy current separator and a gravity separator. All three members should have different reference characters.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 14, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gustafsson (U.S. Patent 5,746,958) in view of Taguchi et al. (U.S. Patent 6,228,301) and Barnes (U.S. Patent 3,538,595).

Gustafsson (U.S. Patent 5,746,958) discloses a manufacturing apparatus to manufacture a wood-like molded product through extrusion molding, the apparatus including a first crushing device 30B to crush or pulverize a resin waste material, a second crushing device 30A to crush or pulverize a wood waste material, the first crushing device 30B being separate from the second crushing device 30A (i.e., fig. 1), a magnet to separate metals (i.e., col. 5, lines 17-21), a blending mixer 40, 100 to mix the crushed resin waste material and the crushed wood waste material to prepare a mixed material, an extrusion molding device 70 to heat and melt the mixed material, and mold the mixed material into an extrusion mold product through extrusion molding, and a

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sizer member 95. A first path is configured to supply the crushed resin waste material obtained from the first crushing device 30B to the blending mixer 40, 100 (i.e., fig. 1), and a second path is configured to supply the crushed resin waste material obtained from the second crushing device 30A to the blending mixer 40, 100 (i.e., fig. 1).

However, Gustafsson (U.S. Patent 5,746,958) does not disclose the crushing device 30A including three devices (namely, as recited in the instant claims, the second crushing device, the third crushing device and the grinding device), the extrusion molding device molding the material into a cylindrical shape, the sizer member including an opening portion having an inner diameter which is substantially the same as an outer diameter of the extrusion mold product in the cylindrical shape produced by the extrusion molding device through the extrusion molding, or a cutting device to cut the extrusion mold product into a predetermined length.

Taguchi et al. (U.S. Patent 6,228,301) discloses a manufacturing apparatus to manufacture a wood-like molded product through extrusion molding, the apparatus including pulverizing equipment including a first pulverizing device to crush a wood waste material (i.e., col. 8, lines 1-16), a second pulverizing device to further crush the crushed wood waste material crushed by the first pulverizing device into fine chips (i.e., col. 8, lines 17-32), and a third pulverizing device to grind the fine chips from the second pulverizing device into a fine powder (i.e., col. 8, lines 33-56), the first, second and third pulverizing devices being separate devices, a blending mixer to mix crushed resin waste material and the crushed wood waste material from the pulverizing equipment to

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prepare a mixed material (i.e., col. 8, lines 63-67), and an extrusion molding device to extrude the mixed material into desired shapes (col. 9, lines 1-4).

Barnes (U.S. Patent 3,538,595) discloses a manufacturing apparatus to manufacture an extrusion mold product with a cylindrical main body through extrusion molding, the apparatus including an extrusion molding device 2 to heat and melt an extrusion material, and mold the material into a cylindrical shape 1 through extrusion molding, a sizer member 3, 6 which includes an opening portion of which an inner diameter is substantially the same as an outer diameter of an extrusion mold product 1 in the cylindrical shape produced by the extrusion molding device 2 through the extrusion molding, and adjusts a sectional shape and a dimension of the extrusion mold product 1 by inserting the extrusion mold product 1 into the opening portion, and a cutting device 8 to cut the extrusion mold product 1, of which the sectional shape and the dimension are adjusted by the sizer member 3, 6, into a predetermined length, thus forming the cylindrical main body.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the second crushing device of Gustafsson (U.S. Patent 5,746,958) to include the first, second and third pulverizing devices of Taguchi et al. (U.S. Patent 6,228,301) (which would correspond to the second crushing device, the third crushing device and the grinding device of the instant claims, respectively) because such a modification would enable the wood waste material to be pulverized in a three step process which effectively pulverizes the wood waste material from lumps to fine powdery particles, as disclosed by Taguchi et al. (U.S. Patent 6,228,301: i.e., col. 7,

line 60, to col. 8, lines 62) and because Taguchi et al. (U.S. Patent 6,228,301: i.e., col. 7, lines 60-67) discloses that a single pulverizing process (i.e., one device) or a three step pulverizing process (i.e., three devices) are alternatives in the art; and to modify the apparatus of Gustafsson (U.S. Patent 5,746,958) such that the extrusion molding device molds the mixed material into a cylindrical shape, that the sizer member includes an opening portion having an inner diameter which is substantially the same as an outer diameter of the extrusion mold product in the cylindrical shape produced by the extrusion molding device through the extrusion molding, and that a cutting device to cut the extrusion mold product into a predetermined length is further included because such a modification would provide an extrusion mold product with a cylindrical shape which was cut to a predetermined length, as disclosed by Barnes (U.S. Patent 3,538,595). Note that it is well known and conventional in the extrusion art to extrude cylindrical shapes, i.e., pipes, to size or calibrate the cylindrical shapes, and to cut the cylindrical shapes to length, as disclosed by Barnes (U.S. Patent 3,538,595). With the proposed modification above, the second path would then extend from the third pulverizing device (i.e., the grinding device) to the blending mixer.

7. Claims 15 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gustafsson (U.S. Patent 5,746,958) in view of Taguchi et al. (U.S. Patent 6,228,301) and Barnes (U.S. Patent 3,538,595) as applied to claims 11, 14, 24 and 25 above, and further in view of Hayashi et al. (U.S. Patent 5,301,881).

Gustafsson (U.S. Patent 5,746,958), Taguchi et al. (U.S. Patent 6,228,301) and Barnes (U.S. Patent 3,538,595) disclose the apparatus substantially as claimed, as

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mentioned above, except for an eddy current separator device and a gravity separator, as recited by instant claim 15.

Hayashi et al. (U.S. Patent 5,301,881) disclose a metal separating apparatus for separating metals from other materials, the apparatus including a magnetic sorter 10, an eddy current separator device 11 to separate a metal which is not attracted to the magnetic sorter but has conductivity, and a gravity separator 24 to separate a substance that is not separated by the magnetic sorter and the eddy current separator device (i.e., fig. 2).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the apparatus with an eddy current separator device and a gravity separator because such a modification would separate various materials from other materials to be recycled, as disclosed by Hayashi et al. (U.S. Patent 5,301,881: i.e., cols. 1-2); because such a modification would remove other metals which were not removed by the magnet of Gustafsson (U.S. Patent 5,746,958); and/or because Gustafsson (U.S. Patent 5,746,958; col. 5, lines 17-21) discloses that removing metal fragments is desired because such metal fragments could cause equipment failure and result in costly repairs and downtime.

Response to Arguments

8. Applicant's arguments with respect to the instant claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that Taguchi et al. (US 6,228,301) ('301 patent) does not disclose a third crushing device configured to further crush the crushed wood waste

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material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing device are each separate crushing devices; a grinding device configured to grind the fine chips into a fine powder; and a blending mixer configured to mix the fine powder of the wood waste material and the crushed resin waste material to produce a mixed material. Rather, the '301 patent discloses a manufacturing method of a simulated wood product, in which, by means of pulverizing recycled wooden members and recycled resinous members after they have been mixed, a mixing process and the pulverizing process can be incorporated into one line, reducing space as well as work in a plant, and improving production efficiency. The '301 patent does not disclose a third crushing device configured to further crush the crushed wood waste material crushed by the second crushing device, to produce fine chips, wherein the first crushing device, the second crushing device, and the third crushing device are each separate crushing devices; and a grinding device configured to grind the fine chips into a fine powder prior to mixing by a blending mixer.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In fig. 1 of Taguchi et al., the examiner agrees that the recycled wood and resin are pulverized AFTER being mixed. However, Taguchi et al. also discloses that it is well known to pulverize the recycled wood and resin separately BEFORE mixing (i.e.,

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fig. 2). Gustafsson et al. (US 5,746,958) even discloses pulverizing the recycled wood and resin separately BEFORE mixing (i.e., fig. 1). Note that the first, second and third pulverizing devices of Taguchi et al. are separate also.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (571) 272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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6/19/07